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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/978,497	10/16/2001	Jung-Hwan Choi ,	9898-199	7318

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EXAMINER

DUONG, KHANH B

ART UNIT PAPER NUMBER

2822

DATE MAILED: 08/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/978,497

Applicant(s)

CHOI, JUNG-HWAN

Examiner

Khanh Duong

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2,4,8,9,26,27,29,30 and 32-41 is/are pending in the application.
- 4a) Of the above claim(s) 32-41 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4 is/are allowed.
- 6) ☒ Claim(s) 2,8,9,26,27,29 and 30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

This Office Action is in response to the amendment filed April 8, 2004.

Accordingly, claims 2, 4, 8, 9, 26, 27, 29 and 30 were amended, claims 1, 3, 5-7, 10-25, 28 and 31 were canceled, and new claims 32-41 were added.

Currently, claims 2, 4, 8, 9, 26, 27, 29, 30 and 32-41 are pending.

### ***Election/Restrictions***

Newly submitted claims 32-41 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: they are drawn to a memory system, classified in class 365, subclass 52.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 32-41 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### ***Response to Arguments***

Applicant's arguments with respect to the pending claims have been considered but are moot in view of the new ground(s) of rejection based on previously cited references.

### ***Claim Objections***

Claims 8, 29 and 30 are objected to because of the following informalities:

Re claims 8 and 29, both at line 2, before "second memory module", "a" should be --the--

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Re claim 30, line 6-8, "first memory module loaded into said socket body in the same direction as said first memory module" (emphasis added) is unclear and should be -- first memory module loaded into said socket body in the same direction as said second memory module--.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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**Claims 2, 26 and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Koyama et al. (US 6,382,983).**

Re claims 2, 26 and 27, Koyama et al. ("Koyama") discloses in FIGs. 1-22 a through socket comprising: a socket body (2 and 3) arranged to load first and second memory modules (6 and 23) in the same direction (see FIG. 21) or opposite direction (see FIG. 17); a first conductor 10 arranged to connect a plurality of adjacent contacts 7 on a first surface 13 of the first memory module 6 to a plurality of adjacent contacts 20 on a first surface 13 of the second memory module 23; and a second conductor 11 arranged to connect a plurality of adjacent contacts 8 on a second surface 15 of the first memory module 6 to a plurality of adjacent contacts 21 on a second surface 15 of the second memory module 23.

**Claims 8, 9, 29 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Donze et al. (U.S. 3,736,471).**

Re claims 8, 9, 29 and 30, Donze et al. ("Donze") discloses in FIGs. 1A-3 a turn around socket comprising: a socket body 16 arranged to load a first and second memory modules 12 in the same direction; a first conductor arranged to connect a plurality of adjacent contacts 30 on a first surface of the first memory module 12 to a plurality of adjacent contacts 30 on a second surface of the first memory module 12 loaded into said socket body 16 in the same direction as said second memory module 12; and a second conductor arranged to connect a plurality of adjacent contacts 30 on a first surface of the second memory module 12 to a plurality of adjacent contacts 30 on a second surface of the second memory module 12. Donze et al. expressly discloses in FIG. 1A the memory module 12 comprising a plurality of adjacent contacts 30 on a first surface of the memory module 12.

***Allowable Subject Matter***

Claim 4 is allowed.

The following is a statement of reasons for the indication of allowable subject matter: none of the prior art of record fairly shows or suggests a through socket comprising: a through socket body arranged to load a first memory module, a second memory module, and a third memory module, said first, second and third memory modules being loaded in a base socket mounted to a board; a first conductor arranged to connect a contact on a first surface of the first memory module to a contact on a first surface of the second memory module; a second conductor arranged to connect a contact on a second surface of the second memory module to a contact on the first surface of the third memory module; and a third conductor arranged to connect a contact on a second surface of the first memory module to a contact on a second surface of the third memory module; wherein the through socket is structured to load said memory modules either above or to the side of said base socket mounted on said board.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh Duong whose telephone number is (571) 272-1836. The examiner can normally be reached on Monday - Thursday (9:00 AM - 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amir Zarabian can be reached on (571) 272-1852. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



KBD

*Maria Guerrero*  
MARIA F. GUERRERO  
PRIMARY EXAMINER